AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph at page 5, lines 4-31 of the specification with the following new paragraph.

The applicant filed a patent, by Japanese Unexamined Patent Publication No. 8-38912, in which the following method is proposed. The average roughness (Ra) of a surface of the flat foil and that of a surface of the corrugated foil before diffusion bonding are kept to be not less than 0.001 μm and not more than 0.2 μm, and further the contact width of the flat foil with the corrugated foil is kept to be not less than 30 μm. Due to the foregoing, diffusion bonding can be excellently conducted in all regions of the honeycomb body from the center to the outer circumferential section by giving a back tension, the intensity of which is not higher than a value at which buckling is caused in the vent hole of the honeycomb body, and also by reducing the diameter of the outer cylinder. Also, the applicant filed ~~a patent, by~~ Japanese Unexamined Patent Publication No. ~~9-119915, in~~ 10-309472 in which the following method is proposed. The contact width of the flat foil with the corrugated foil is kept at a value not less than 5 times of the thickness t of the flat foil and the corrugated foil. The flat foil and the corrugated foil are wound while a back tension, the intensity of which is 0.2 to 1.5 kgf/cm, is being given to the honeycomb body, and

diffusion bonding is conducted in a temperature range from 1100 to 1250°C, and it is preferable that diffusion bonding is conducted in a temperature range of vacuum heat treatment corresponding to the average roughness Rac (μm) in the width direction of the plane foil.

Please replace the paragraph at page 13, lines 4-12 of the specification with the following new paragraph.

In order to make (1) the mechanical strength of the diffusion bonded joint and (2) the resistance to oxidation compatible with each other, the inventors made investigation into an interaction between the manufacturing, condition of catalyst carrier of diffusion bonding and aluminum. As a result of the investigation, in order to express a state of vaporization of aluminum, the following λb, which is a dimensionless number, was newly introduced, wherein b is the contact width of the pieces of flat foil and corrugated foil in meters (m).

Please replace the paragraph at page 15, lines 9-20 of the specification with the following new paragraph.

Surface configurations of some pieces of foil made of stainless steel have an orientation. For example, when a piece of foil is rolled by a pair of finishing rollers having flaws in the circumferential direction, these flaws are transferred onto a surface of the piece of foil. Therefore, flaws are caused on the piece of foil in the longitudinal

direction. When a piece of corrugated foil is made from the above piece of foil having flaws when it is made to pass through a pair of corrugating gears 9 as shown in Fig. 6, stripe-shaped flaws 11 are caused in the longitudinal direction in the protrusions [[6]] of the piece of foil 6 to be bonded.

Please replace the paragraph at page 19, line 30 to page 20, line 19 of the specification with the following new paragraph.

In the present invention, as shown in Fig. 7(a), it is preferable that the length of the soldered portion 12 in the longitudinal direction of the catalyst carrier is 5% to 50% of the diameter of the catalyst carrier from the exhaust gas ~~flowing~~ entry face 3 shown in Fig. 10. It is more preferable that the length of the soldered portion 12 is 10% to 30%. Concerning portions to be soldered, it is preferable that all portions are soldered in the diameter direction of the catalyst carrier. The length of the soldered portion is determined to be not less than 5% of the diameter of the catalyst carrier, and it is preferable that the length of the soldered portion is determined to be not less than 10% of the diameter of the catalyst carrier. The reason is that the rigidity of the honeycomb body in the radial direction is increased so that the honeycomb body can resist thermal stress in the radial direction generated in the drift current portion on the entry side of exhaust gas. The length of the

soldered portion is determined to be not more than 50% of the diameter of the catalyst carrier, and it is preferable that the length of the soldered portion is determined to be not more than 30% of the diameter of the catalyst carrier. The reason is that the honeycomb body is given flexibility in the axial direction so that thermal stress in the axial direction generated on the entry side of exhaust gas can be released to the delivery side of the exhaust gas.

AMENDMENTS TO DRAWINGS

Attached hereto are replacement sheets for sheets 1/8, 4/8, 6/8, and 7/8 of the drawings.

Replacement sheet 1/8 amends Fig. 1 and Fig. 2, wherein Fig. 1 and Fig. 2 contain the legend --Prior Art--.

Replacement sheet 4/8 amends Fig. 5(b), wherein Fig. 5(b) contains the legend --Prior Art--.

Replacement sheet 6/8 amends Figs. 7(a) and 7(b), wherein reference numeral 13 is deleted from Figs. 7(a) and 7(b).

Replacement sheet 7/8 amends Fig. 8 wherein reference numeral 13 is deleted from Fig. 8.